

PRELIMINARY AMENDMENT

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Amendments to the Claims:

1 (currently amended). An electronic circuit, capable of terminating a plurality of conductors at, or near, a node on a network, comprising detecting means, operable to detect current in at least one of the plurality of conductors, and switching means operable to switch the circuit between being a continuing circuit, upon the detecting means detecting current greater than a first predetermined threshold, and being a terminating circuit, upon the detecting means detecting current at, or less than, a second predetermined threshold, ~~characterised in that~~ wherein the detecting means comprises a sensing resistor, connected in series with the at least one of the plurality of conductors, and means for detecting voltage across the sensing resistor, such that a change in current flowing in the at least one of the plurality of conductors, indicative of a break or fault in a said network, is detected by sensing a change in voltage across the sensing resistor.

2 (original). An electronic circuit as claimed in Claim 1, wherein the terminating circuit comprises impedance matching means.

3 (original). An electronic circuit as claimed in Claim 2, wherein the impedance matching means comprises a terminating resistor connected in series with a terminating capacitor.

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4 (currently amended). An electronic circuit as claimed in ~~any of the preceding claims~~
Claim 1, wherein the first threshold is the same as the second threshold.

5 (currently amended). An electronic circuit as claimed in ~~any of the preceding claims~~
Claim 1, wherein the means for detecting voltage is a differential amplifier.

6 (currently amended). An electronic circuit as claimed in ~~any of the preceding claims~~
Claim 1 wherein the switching means comprises a transistor.

7 (currently amended). An electronic circuit as claimed in Claim 6, wherein the transistor
comprises a base terminal connected to an output of the detecting means.

8 (currently amended). An electronic circuit as claimed in Claims 6 ~~or 7~~, wherein the
transistor comprises a collector terminal, connected to the impedance matching means, and an
emitter terminal connected to the, or each, of the other conductors.

9 (currently amended). A node comprising an electronic circuit as claimed in ~~any of the~~
~~preceding claims~~ Claim 1.

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10 (currently amended). A node as claimed in Claim 9, further comprising checking means operable, upon the detecting means detecting current at, or less than, the second predetermined threshold, to check the status of the conductors connected to an adjacent node.

11 (currently amended). A network comprising at least one electronic circuit as claimed in ~~any of the preceding claims~~ Claim 1.

12 (currently amended). A network as claimed in Claim 11, comprising a plurality of power supplies operable to provide current flowing in opposing directions through the network.